

**Table 2 — Characteristics of the PE compound, tested in the form of pipe**

Characteristics	Units	Requirements	Test parameters	Test method
Resistance to gas constituents	h	$\geq 20$	80 °C 2 MPa	Annex B
Resistance to rapid crack propagation (RCP): S4 test (e $\geq$ 15 mm)	bar	$p_c \geq 1,5 \times MOP$ with $p_c = 3,6 \times p_{C,S4} + 2,6$ (bar) <sup>a</sup>	0 °C	ISO 13477
Resistance to slow crack growth	h	$\geq 500$	80 °C; 8,0 bar <sup>b</sup> 80 °C; 9,2 bar <sup>c</sup>	ISO 13479
Resistance to weathering (for non-black compounds only)		After weathering;  Hydrostatic strength of pipe <sup>d</sup>  Elongation at break of pipe  Decohesion of an electrofusion joint – percent brittle failure	$E \geq 3,5 \text{ J/m}^2$ <sup>e)</sup>  80°C; $\geq 1000$ h  $\geq 350$ % ISO 8085-3  23 °C; $\leq 33,3$ %	ISO 16871  ISO FDIS 1167-1/-2  ISO 11413 Joining condition 1  ISO 6259-3 ISO 13954
<p>a Full scale/S4 correlation factor is equal to 3,6 and is defined by the formula:  <math>p_{C,FS} + p_{atm} = 3,6 (p_{C,S4} + p_{atm})</math></p> <p>NOTE Attention is drawn to the fact that the correlation factor may be modified, when revising ISO 13477, according to the result of work of ISO/TC 138/SC5 'Plastics pipes, fittings and valves for the transport of fluids - General properties of pipes, fittings and valves of plastics materials and their accessories – Test methods and basic specifications'.</p> <p>If the requirement is not met, then retest using the full-scale test ISO 13478. In this case:  <math>p_C = p_{C,FS}</math></p> <p>b Test parameter for PE 80, <math>d_i</math> 110 mm or 125 mm, SDR 11.  c Test parameter for PE 100, <math>d_i</math> 110 mm or 125 mm, SDR 11.  d Test parameter for PE 80: 4,0 MPa. Test parameter for PE 100: 5,0 MPa.  e The value of 3,5 GJ/m<sup>2</sup> represents the yearly exposure to sunlight near the 50<sup>th</sup> degree of latitude. This value may not be appropriate for other global locations; in such cases national standards and regulations will apply'</p>				